

## The Probable Occurrence of the Mymarid Genus *Dicopus* Enoch in North America (Hymen.).

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Several weeks ago, Dr. C. Gordon Hewitt, Dominion Entomologist, Ottawa, Canada, turned over to me for identification a number of slide-mounted parasitic Hymenoptera obtained from spruce budworm rearing material, among which I found a single mymarid so minute as almost to be lost in the medium in which it was mounted. Casually, I placed it at once as an *Alaptus* but more leisurely examination showed that it differed from that genus in having two more segments in the antennæ. This being the case, the species could not be placed into any of the genera of the Gonatocerinae, since there are none in that sub-family which bear twelve-jointed antennæ in the males. There is an English genus, however, recently described by Enoch for *Dicopus minutissima* Enoch, which closely resembles *Alaptus* Haliday in form, but which differs in bearing two more antennal segments; the male of this genus is unknown. Now, this Canadian species precluded from being an *Alaptus* must belong to *Dicopus*, at least until we know to the contrary. It is one of the smallest North American Mymaridæ and because of this and also because of its characteristic appearance, I believe it incumbent on me to describe it rather than risk its being lost. It can be easily recognized; thus, it is an *Alaptus* male with two more segments in the antennæ, the antennal funicle peculiar because of the abrupt narrowing of the second joint and the fore wings more or less characteristic by reason of their comparatively abundant discal ciliation. I describe the species in detail herewith.

Family Mymaridae, Subfamily Gonatocerinae, Tribe Gonatocerini, Genus *Dicopus* Enoch.

### 1. *Dicopus halitus* new species.

Normal position.

*Male*.—Length, 0.23 mm. Very minute, barely visible to the naked eye as a fleck of dust. Abdomen sessile; tarsi 5-jointed.

General color sooty black, all of the legs and the whole of the antennæ pallid yellowish; wings very slightly clouded throughout, the

margins of the fore wings distad rimmed with yellowish. Eyes dark reddish.

With all of the characters of *Alaptus* Haliday, male, but the antennæ 12-jointed; resembling an *Alaptus*. However, the fore wing is slenderer at that portion just distad of the venation and the caudal wings are as narrow as it is possible for them to be and still have a blade, narrower by a half than those of *Alaptus*. Fore wings shaped as in *Alaptus*, their marginal cilia long and slender, the longest at and around the apex where they are four or more times longer than the wing is wide just before apex (its widest portion), the cilia symmetrical along each margin, those around the dilated apical portion of the blade colorless a short distance out from their insertions, making the usual colorless path which follows the outlines of the margins of the apex. Blade of the fore wing characterized by bearing in the dilated portion (distal half or less) a single midlongitudinal paired line of short discal cilia and a single line of the same along each margin, all three lines about equal in length. Venation as in *Alaptus* and the wing has the usual dilated portion proximad, along the caudal margin. Caudal wings very narrow and nearly straight but slightly widening distad, their marginal cilia long, the longest (at apex) about half the length of the longest of the fore wing, present farther proximad along the caudal margin of the blade; the blade of the posterior wing bearing along the distal half or less, at each margin, a single line of discal cilia, distinct but short; no discal cilia in the midlongitudinal line of the posterior wing. All tarsal joints short, the proximal one longest, the tibial spurs single, minute, straight. Legs simple, slender, but of the usual length.

Antennæ 12-jointed, filiform as in male *Alaptus*; characterized by having the second funicle joint abruptly narrower and slightly shorter than the first, somewhat as the case with *Alaptus iceryae* Riley but the joint is slenderer and longer than wide; scape and pedicel short, the latter widest of all segments; funicle 1 shorter and much narrower than the pedicel; 2 abruptly narrower and slightly shorter than 1, a half shorter than 3 which is also distinctly broader; 4 and 5 subequal, each a fourth shorter than 3, each longer than 1; 6, 7, 8 and 9 subequal, each slightly longer than the one preceding, 6 subequal to 3, 9 longest of the flagellum. Joint 10 or the club conical, subequal to 4. All flagellar segments distinctly longer than wide. Pubescence sparse and minute. (From 1 specimen, 2-3 inch objective, 1-inch optic. Bausch and Lomb.)

*Female*.—Unknown.

Described from a single male specimen on a slide in balsam received for identification from Dr. C. Gordon Hewitt, Dominion Entomologist, Ottawa, Canada, the slide being labelled

"Ex. Spruce budworm material, Maniwaki, P. Q., 27 VI. '11 Division of Entomology." The supposed host is *Tortrix fumiferana* Clemens, but of course the record is doubtful; I would suggest, instead, a psocid egg or a coccid pupa present in the host material.

*Habitat*.—Canada—Quebec (Maniwaki), G. E. Sanders.

*Host*.—Unknown.

*Type*.—Cat. No. 14,184, United States National Museum, Washington, D. C., one male in balsam.

### Notes on Two Tipulidae (Dipt.).

By CHARLES P. ALEXANDER, Ithaca, N. Y.

The following species were taken in Fulton County, New York, during 1909 and 1910. The first species is a novelty and cannot be referred to any of the known genera of crane flies. After a careful examination of the literature, I have decided to erect the following genus:

#### SACANDAGA gen. nov.

Subcosta, long; vein  $R^2$  very short, oblique; no radial cross-vein;  $MI+2$  fused to margin. Antennae of 16 segments; basal segment rather globular; second globular, cyathiform;

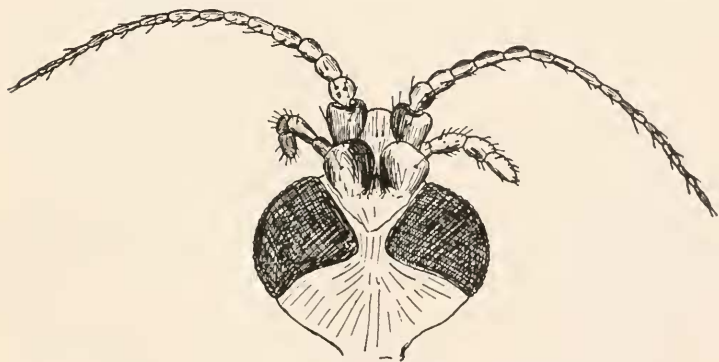


Fig. 1.—*Sacandaga flava* dorsal aspect of head; Cotype No. 2.

first segment of the flagellum globular; second to ninth gradually cylindrical; tenth to fourteenth, elongate-cylindrical; all